

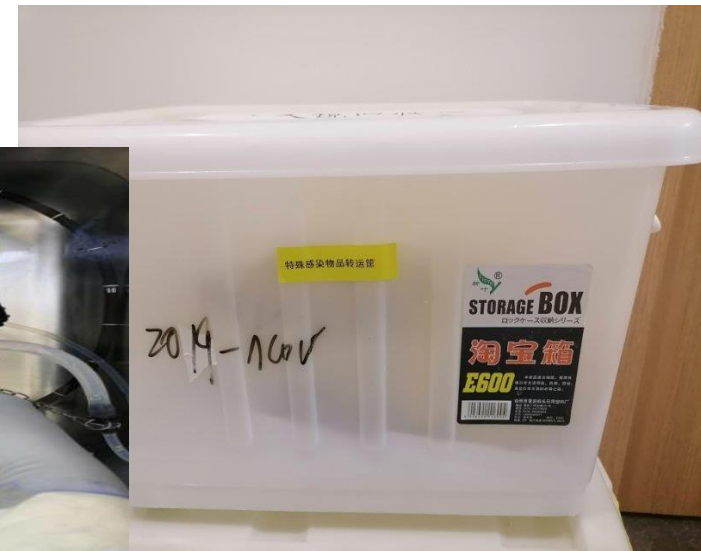
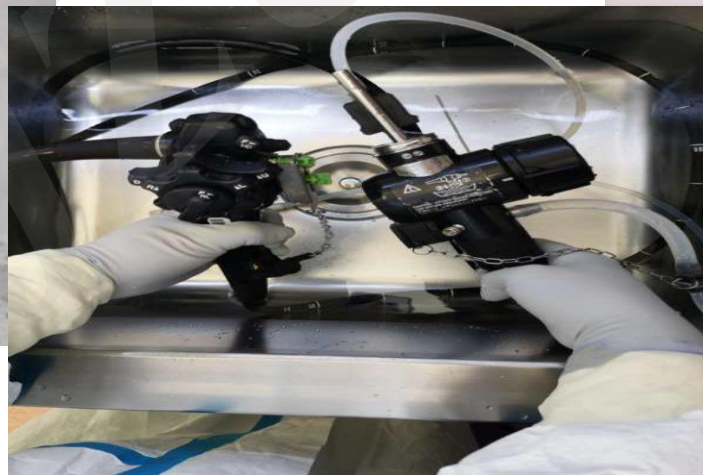
**Cite this as:** Qing GU, Hua-fen WANG, Ying FANG, Ye LU, Zhe SHEN, Yan WANG, Xin WU, Li CEN, Yi-shu CHEN, 2020. Analysis of an improved workflow of endoscope reprocessing for bedside endoscopic diagnosis and treatment on COVID-19 patients. *Journal of Zhejiang University-Science B (Biomedicine & Biotechnology)* , 21(5):416-422.  
<http://doi.org/10.1631/jzus.B2000109>

# **Analysis of an improved workflow of endoscope reprocessing for bedside endoscopic diagnosis and treatment on COVID-19 patients**

**Key words:** Novel coronavirus, COVID-19, 2019-nCov, Disinfection, Gastrointestinal endoscopy, Infection prevention and control

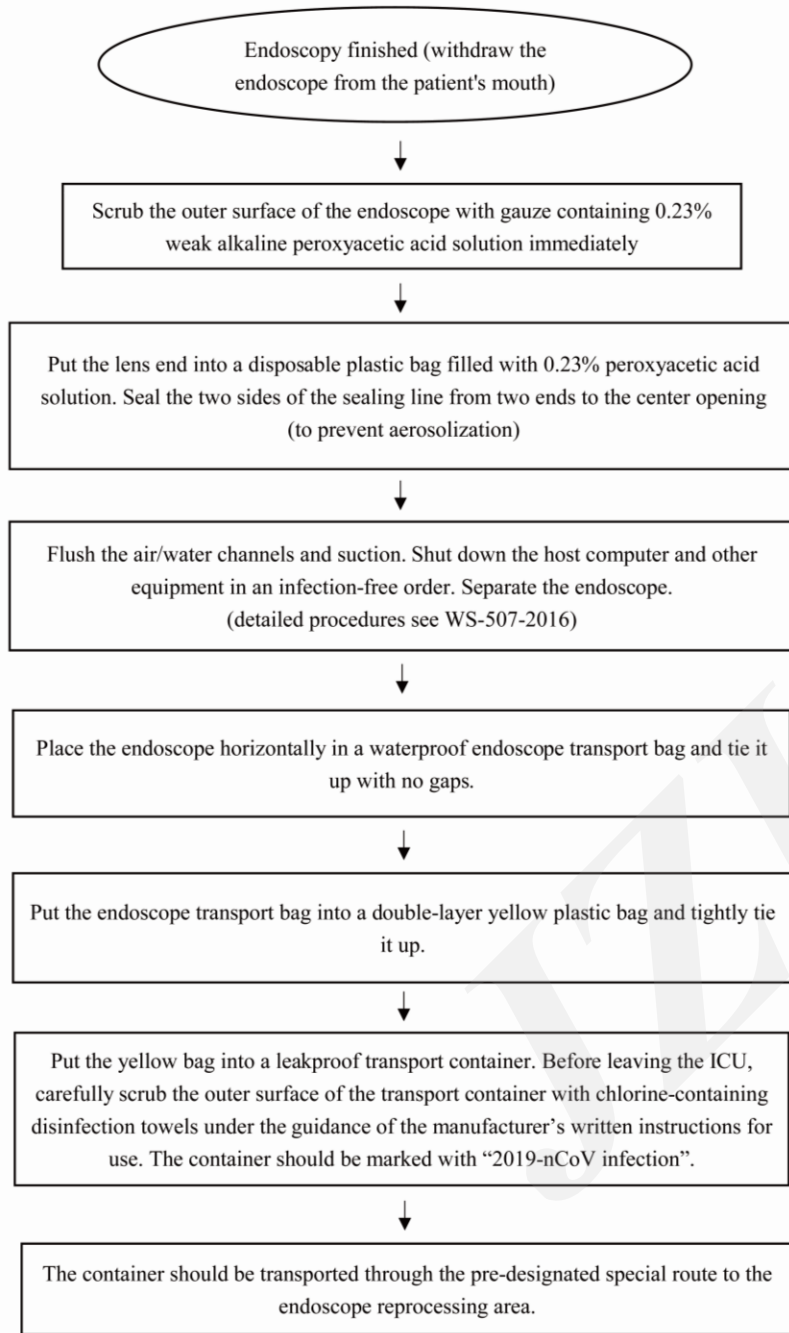
# Research Summary

This study improved the workflow of endoscope reprocessing including the selection of chemicals in an effort to ensure quality control throughout the clinical management towards COVID-19 patients, which provides an improved version of endoscopic reprocessing guidelines for bedside endoscopic diagnosis and treatment on COVID-19 patients for reference..

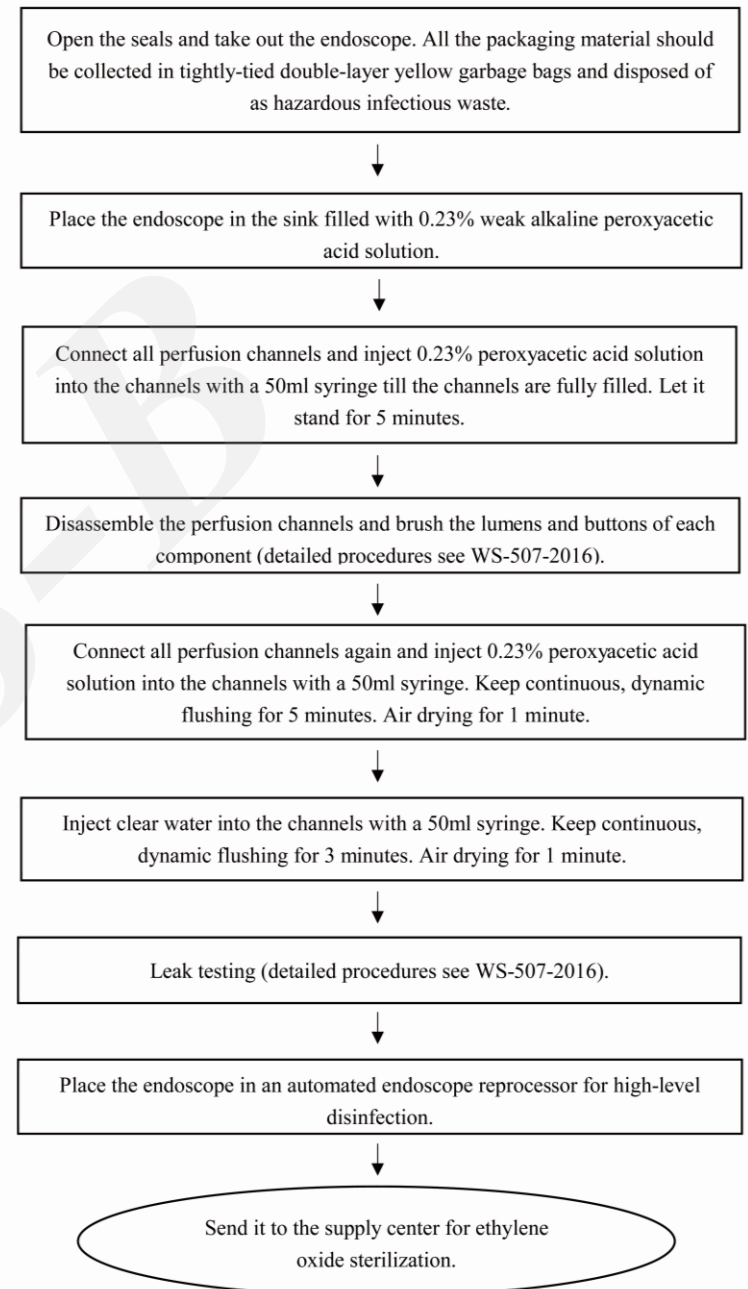


# ***Innovation points***

- **Specialized training for health workers**
- **Special channel for endoscope transport and personal protection for endoscope reprocessing personnel**
- **Preparation for endoscope reprocessing**
- **Preparation of personal protective equipment**
- **Improved strategies for bedside pre-processing of contaminated endoscopes**
- **Improved strategies for endoscopic cleaning, dis-infection and sterilization**
- **Improved strategies for medical waste disposal**



**Fig. 1 Workflow of bedside pre-processing of endoscopes contaminated by patients infected with COVID-19.**



**Fig. 2 Workflow of cleaning, disinfection and sterilization of endoscopes contaminated by patients infected with COVID-19.**